

WHAT IS CLAIMED IS:

1. A standardized data representation of an object-relational data model, the standardized data representation configured to support an automatic derivation of a dimensional data model that corresponds to the object-relational data model.
2. The standardized data representation of claim 1, wherein the standardized data representation enables the object-relational data model to be specified and decorated with metadata so as to support the derivation of the dimensional model.
3. The standardized data representation of claim 1, wherein the standardized data representation is configured to be processed by a processing engine that is adapted to autonomously derive the dimensional model.
4. The standardized data representation of claim 1, wherein the standardized data representation includes a description of objects and object relationships reflected in the object-relational data model.
5. The standardized data representation of claim 1, wherein the standardized data representation includes a description of persistent data store mappings associated with the object-relational data model.

6. The standardized data representation of claim 1, wherein the standardized data representation includes a description of at least one focal point that represents a point of analysis indicated in association with data in the object-relational data model.

7. The standardized data representation of claim 1, wherein the standardized data representation includes:

- a description of objects and object relationships reflected in the object-relational data model; and
- a description of persistent data store mappings associated with the object-relational data model.

8. The standardized data representation of claim 7, wherein the standardized data representation further comprises a description of at least one focal point that represents a point of analysis indicated in association with data in the object-relational data model.

9. The standardized data representation of claim 1, wherein the standardized representation comprises a description of at least one data element selected from a group consisting of a class from the object-relational data model, a data member associated with a class from the object-relational data model, a

collection of object-relational mappings that specify how data is retrieved from a relational database, a field that uniquely identifies a class from the object-relational data model, an association relationship indicator that identifies a relationship among classes in the object-relational data model, a composition relationship indicator that identifies a relationship among classes in the object-relational data model, and a measure that identifies an interesting numerical value used for generation of the dimensional model.

10. A tagged format data schema for representing an object-relational data model, the tagged format data schema being configured to support an automatic derivation of a dimensional data model that corresponds to the object-relational data model.

11. The schema of claim 10, wherein the schema includes a tag used to indicate a class in the object-relational data model.

12. The schema of claim 10, wherein the schema includes a tag for indicating a data member associated with a class in the object-relational data model.

13. The schema of claim 10, wherein the schema includes means for indicating a collection of object-relational mappings that specify how a data member

associated with a class in the object-relational data model can be filled with data retrieved from at least one table in a relational database.

14. The schema of claim 10, wherein the schema includes a tag for indicating a key field that uniquely identifies a class included in the object-relational data model.

15. The schema of claim 10, wherein the schema includes a tag for indicating a name field that uniquely identifies an instance of a class included in the object-relational data model.

16. The schema of claim 10, wherein the schema includes a tag for indicating an association relationship among multiple classes in the object-relational data model.

17. The schema of claim 10, wherein the schema includes a tag for indicating a composition relationship among multiple classes in the object-relational data model.

18. The schema of claim 10, wherein the schema includes a tag for indicating a measure, a measure being an interesting numerical value used for generation of the dimensional model.

19. The schema of claim 10, wherein the schema enables the object-relational data model to be specified and decorated with metadata so as to support the derivation of the dimensional model.

20. The schema of claim 10, wherein the schema is configured to be processed by a processing engine that is adapted to autonomously derive the dimensional model.

21. The schema of claim 10, wherein the schema includes a description of objects and object relationships reflected in the object-relational data model.

22. The schema of claim 10, wherein the schema includes a description of persistent data store mappings associated with the object-relational data model.

23. The schema of claim 10, wherein the schema includes a description of at least one focal point that represents a point of analysis indicated in association with data in the object-relational data model.

24. The schema of claim 10, wherein the schema includes:

a description of objects and object relationships reflected in the object-relational data model; and
a description of persistent data store mappings associated with the object-relational data model.

25. The schema of claim 24, wherein the schema further comprises a description of at least one focal point that represents a point of analysis indicated in association with data in the object-relational data model.

26. The schema of claim 10, wherein the schema comprises a description of at least one data element selected from a group consisting of a class from the object-relational data model, a data member associated with a class from the object-relational data model, a collection of object-relational mappings that specify how data is retrieved from a relational database, a field that uniquely identifies a class from the object-relational data model, an association relationship indicator that identifies a relationship among classes in the object-relational data model, a composition relationship indicator that identifies a relationship among classes in the object-relational data model, and a measure that identifies an interesting numerical value used for generation of the dimensional model.

27. An XML data schema for representing an object-relational data model, the XML data schema being configured to support an automatic derivation of a dimensional data model that corresponds to the object-relational data model.

28. The schema of claim 27, wherein the schema includes a tag used to indicate a class in the object-relational data model.

29. The schema of claim 27, wherein the schema includes a tag for indicating a data member associated with a class in the object-relational data model.

30. The schema of claim 27, wherein the schema includes means for indicating a collection of object-relational mappings that specify how a data member associated with a class in the object-relational data model can be filled with data retrieved from at least one table in a relational database.

32. The schema of claim 27, wherein the schema includes a tag for indicating a key field that uniquely identifies a class included in the object-relational data model.

33. The schema of claim 27, wherein the schema includes a tag for indicating a name field that

uniquely identifies an instance of a class included in the object-relational data model.

34. The schema of claim 27, wherein the schema includes a tag for indicating an association relationship among multiple classes in the object-relational data model.

35. The schema of claim 27, wherein the schema includes a tag for indicating a composition relationship among multiple classes in the object-relational data model.

36. The schema of claim 27, wherein the schema includes a tag for indicating a measure, a measure being an interesting numerical value used for generation of the dimensional model.

37. The schema of claim 27, wherein the schema enables the object-relational data model to be specified and decorated with metadata so as to support the autonomous derivation of the dimensional model.

38. The schema of claim 27, wherein the schema comprises a description of at least one data element selected from a group consisting of a class from the object-relational data model, a data member associated with a class from the object-relational data model, a collection of object-relational

mappings that specify how data is retrieved from a relational database, a field that uniquely identifies a class from the object-relational data model, an association relationship indicator that identifies a relationship among classes in the object-relational data model, a composition relationship indicator that identifies a relationship among classes in the object-relational data model, and a measure that identifies an interesting numerical value used for generation of the dimensional model.

39. An extensible system for supporting generation of dimensional data model, the system comprising:
a driver for receiving source data and pre-processing it into a format consistent with a model definition schema; and
a processing engine for receiving data formatted to be consistent with the model definition schema, and for generating a corresponding dimensional data model.

40. The system of claim 39, wherein the processing engine is a translation engine configured to receive data formatted to be consistent with the model definition schema, and further configured to produce a customized corresponding dimensional data model.